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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,001	04/26/2001	Toshimichi Kishimoto	520.40043X00	7058

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/842,001	Applicant(s) KISHIMOTO ET AL.	
	Examiner Kristie Shingles	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims 7 and 14 have been amended.

Claims 1-6 have been cancelled.

Claims 7-20 are pending.

Response to Arguments

1. Applicant's arguments with respect to claim 7 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 7, 8, 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jesionowski* (US 6,044,442) in view of *Chong, Jr* (US 6,721,317).

- a. **Per claim 7**, *Jesionowski* teaches a storage operating system comprising:

- an external storage device having storage data and storage operating data and a service processor for operating said storage operating data (Figure 1, col.3 lines 13-53);

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- a host computer coupled with said external storage device via a first connection (Figure 1, col.3 lines 54-63); and
- a storage management server coupled with said host computer via a second connection and said service processor via a third connection (Figure 1, col.3 line 64-col.4 line 12),
- wherein said storage management server executes a storage operating data server program (Figure 1, col.4 lines 13-20 and 53-62), and
- wherein said host computer executes an application program associated with said storage operating data server program so as to read/write said storage operating data from/to said external storage device through said storage management server and said third connection (col.4 lines 13-20, col.5 lines 3-20), and (col.3 lines 35-42 and 48-57).

Yet *Jesionowski* fails to explicitly teach wherein said host computer commands reads/writes of said storage data from/to said external storage device through said first connection. However, *Chong Jr.* teaches that the host commands reads/write of storage data through the separate control path connecting the storage to the host (Figure 3A, col.6 lines 39-67, col.7 lines 14-16 and 23-33, col.7 line 66-col.8 line 2, col.10 lines 39-40, col.11 lines 60-67, col.12 lines 30-31, col.16 lines 5-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Jesionowski* and *Chong Jr.* to provide read/write commands to the storage via the control path, in order to efficiently transmit command and control information without interfering or impeding the transmission of data through the data path which allows for independent scalability and transfer rates of each path.

b. **Claim 14** contains limitations that are substantially equivalent to claim 7 and is therefore rejected under the same basis.

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c. **Per claim 8**, *Jesionowski* teaches the storage operating control system according to claim 7, wherein said host computer operates in accordance with said storage operating data which the storage management server reads from said external storage device (col.4 lines 53-62, col.5 lines 8-20).

d. **Claim 15** is substantially equivalent to claim 8 and is therefore rejected under the same basis.

4. **Claims 9, 10, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jesionowski* (US 6,044,442) and *Chong, Jr* (US 6,721,317) in view of *Kumar et al* (US 6,343,287).

a. **Per claim 9**, *Jesionowski* and *Chong, Jr* teach the storage operating control system as defined in claim 7. Although *Chong, Jr* comprises a switch (Abstract, col.26 line 62-col.27 line 7), *Chong, Jr* fails to explicitly teach the switch for selectively shutting off said third connection between said service processor and said storage management server. However *Kumar et al* teach an optional close connection command for closing the connection between the data store and the server (col.20 lines 41-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Jesionowski* and *Chong, Jr* with *Kumar et al* for the purpose of implementing selective shut-off of a connection between the storage server and the processor the remote storage device, because communication between the server and the remote storage device is not always necessary since the host, itself is in communication with the server and the remote storage device. Selectively closing a connection between a server and

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storage is obvious for disabling/enabling load on the server and for allocating management/administrative abilities to only one server at a time via opening/closing connectivity with the server.

b. **Claim 16** is substantially similar to claim 9 and is therefore rejected under the same basis.

c. **Per claim 10**, *Jesionowski* and *Kumar et al* teach the storage operating control system as defined in the claim 9, *Kumar et al* further teach wherein the switch is provided in an interface of said service processor (col.20 lines 25-40, col.20 line 56-col.21 line 5).

d. **Claim 17** is substantially similar to claim 10 and is therefore rejected under the same basis.

5. **Claims 11-13 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jesionowski* (US 6,044,442) and *Chong, Jr* (US 6,721,317) in view of *Barry et al* (US 2005/0216421).

a. **Per claim 11**, *Jesionowski* and *Chong, Jr* teach the storage operating control system as defined in claim 7, yet fails to explicitly teach the storage operating control system as defined in the claim 7, wherein said storage management server comprising a WWW (World Wide Web) terminal connection and a WWW server program to allow access of the storage operating data using the WWW terminal connection. However, *Barry et al* disclose a storage management server comprising a WWW server program wherein WWW access (Figures 38, 41, 43 and 51, paragraphs 0606, 0666 and 0761).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Jesionowski* and *Chong, Jr* with *Barry et al* for the purpose of provisioning a WWW server program on the storage management server in order to provide access to the WWW via WWW interface; because it allows for secure communications and access of storage operating data over the Web/Internet for conducting management, operating and configuration duties over a web page.

b. **Claim 18** is substantially similar to claim 11 and is therefore rejected under the same basis.

c. **Per claims 12 and 13**, *Jesionowski* teaches the storage operating control system as defined in claim 7, yet fails to explicitly teach the limitation using JAVA RMI. However, *Barry et al* disclose use of JAVA RMI for the client server connection along with TCP/IP communications protocol (paragraphs 0382-0386).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Jesionowski* and *Barry et al* for the purpose of extending protocol compatibility with JAVA objects; because it would permit remote communication with other JAVA objects in the network from the client/host to the server.

d. **Claims 19 and 20** are substantially similar to claim 12 and 13 and are therefore rejected under the same basis.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Klein (6,999,448), Pothapragada et al (6,389,432), Chong Jr (6,370,605) and (6,604,155), Blades et al (6,493,811).

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


JASON CARDONE
SUPERVISORY PATENT EXAMINER